



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,678	04/18/2006	Sergey Nikolaevich Zheltov	42P16122	1705

7590 09/13/2006

Blakely Sokoloff
Taylor & Zafman
7th Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025

EXAMINER

NGUYEN, KHAI M

ART UNIT PAPER NUMBER

2819

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/564,678

Applicant(s)

ZHELTOV ET AL.

Examiner

Khai M. Nguyen

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9,11-15,17 and 19-23 is/are rejected.
- 7) ☒ Claim(s) 2,8,10,16,18 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The application has not been checked to the extent necessary to determine the presence of all possible typographical and grammatical errors. However, Applicant's cooperation is requested in correcting any errors of which he/she may become aware in the application.
2. An abstract on a separate sheet is required (37 CFR 1.72(b)).
3. Summary of the invention is missing (37 CFR 1.77(b)).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-7, 9, 11-15, 17, 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Wood (US 6,147,629) or Wood.

Regarding claim 1, Wood discloses (Figs. 2, 3A) a method for decoding variable length prefix codes in a bit stream (col. 4, lines 3-8 and lines 35-45) comprising:

reading or retrieving, from the bit stream (i.e., the encoded bit stream), a number of bits (e.g., N bits) sufficient to contain or store a longest variable length code (col. 6, lines 1-8) of a system (Fig. 2);

selecting or retrieving, a predetermined number of bits (i.e., first and second values) from the N bits read; and

obtaining or determining, from a data structure, in accordance with an actual value of the bits (i.e., the selected first and second values), at least a decoded value and a validity indicator associated a variable length code (col. 2, lines 46-54).

Regarding claim 3, Wood discloses the method of claim 1 wherein reading or retrieving the N bits comprising making the specified number of bits (first and second values) accessible for future operations (col. 5, lines 28-60).

Regarding claim 4, Wood discloses the method of claim 1 wherein selecting or retrieving the first and second values comprising making the specified number of bits (first and second values) accessible for future operations faster than reading the same number of bits (col. 5, lines 28-60).

Regarding claim 4, Wood discloses the method of claim 1 wherein the predetermined number of bits (N bits) comprises the maximal number of bits (10 bits – col. 6, lines 3-8) to be used as an index to the data structure (Type 1 VLC - Fig. 3A).

Regarding claim 6, Wood discloses the method of claim 1 wherein the validity indicator indicates whether the decoded value is valid (summary).

Regarding claim 7, Wood discloses the method of claim 1 wherein the data structure (Table 1 of Figs. 2 and 3A) used to obtain at least the decoded value and validity indicator associated with a variable length code comprises a memory area (memory 214 of Fig. 2) containing at least the decoded value and validity indicator for each bit combination that can be formed from the predetermined number of bits (N bits).

Regarding claim 9, Wood discloses (Figs. 2, 3A) an article (214 of Fig. 2) comprising: a machine accessible medium having a plurality of machine readable instructions (col. 4, lines 27-30; col. 5, lines 3-14), wherein the instruction are executed by a processor (208 of Fig. 2) the instructions provide for decoding variable length prefix codes in a bit stream by (col. 4, lines 3-8 and lines 35-45):

reading or retrieving, from the bit stream (i.e., the encoded bit stream), a number of bits (e.g., N bits) sufficient to contain or store a longest variable length code (col. 6, lines 1-8) of a system (Fig. 2);

selecting or retrieving, a predetermined number of bits (i.e., first and second values) from the N bits read; and

obtaining or determining, from a data structure, in accordance with an actual value of the bits (i.e., the selected first and second values), at least a decoded value and a validity indicator associated a variable length code (col. 2, lines 46-54).

Regarding claim 11, Wood discloses the article of claim 9 wherein instructions for reading or retrieving the N bits comprising instructions for making the specified number of bits (first and second values) accessible for future operations (col. 5, lines 28-60).

Regarding claim 12, Wood discloses the article of claim 9 wherein instructions for selecting or retrieving the first and second values comprising instructions for making the specified number of bits (first and second values) accessible for future operations faster than reading the same number of bits (col. 5, lines 28-60).

Regarding claim 13, Wood discloses the article of claim 9 wherein the predetermined number of bits (N bits) comprises the maximal number of bits (10 bits – col. 6, lines 3-8) to be used as an index to the data structure (Type 1 VLC - Fig. 3A).

Regarding claim 14, Wood discloses the article of claim 9 wherein the validity indicator indicates whether the decoded value is valid (summary).

Regarding claim 15, Wood discloses the article of claim 9 wherein the data structure (Table 1 of Figs. 2 and 3A) used to obtain at least the decoded value and validity indicator associated with a variable length code comprises a memory area (memory 214 of Fig. 2) containing at least the decoded value and validity indicator for each bit combination that can be formed from the predetermined number of bits (N bits).

Regarding claim 17, Wood discloses a system (Fig. 2) for decoding variable length prefix codes in a bit stream (col. 4, lines 3-8 and lines 35-45), comprising:

logic (decoder 200) to read or retrieve, from the bit stream (i.e., the encoded bit stream), a number of bits (e.g., N bits) sufficient to contain or store a longest variable length code (col. 6, lines 1-8) of a system (Fig. 2);

logic (200) to select or retrieve, a predetermined number of bits (i.e., first and second values) from the N bits read; and

logic (200) to obtain or determine, from a data structure, in accordance with an actual value of the bits (i.e., the selected first and second values), at least a decoded value and a validity indicator associated a variable length code (col. 2, lines 46-54).

Regarding claim 19, Wood discloses the system of claim 17 wherein logic to read or retrieve the N bits comprising making the specified number of bits (first and second values) accessible for future operations (col. 5, lines 28-60).

Regarding claim 20, Wood discloses the system of claim 17 wherein logic to select or retrieve the first and second values comprising making the specified number of bits (first and second values) accessible for future operations faster than reading the same number of bits (col. 5, lines 28-60).

Regarding claim 21, Wood discloses the system of claim 17 wherein the predetermined number of bits (N bits) comprises the maximal number of bits (10 bits – col. 6, lines 3-8) to be used as an index to the data structure (Type 1 VLC - Fig. 3A).

Regarding claim 22, Wood discloses the system of claim 17 wherein the validity indicator indicates whether the decoded value is valid (summary).

Regarding claim 23, Wood discloses the system of claim 17 wherein the data structure (Table 1 of Figs. 2 and 3A) used to obtain at least the decoded value and validity indicator associated with a variable length code comprises a memory area (memory 214 of Fig. 2) containing at least the decoded value and validity indicator for each bit combination that can be formed from the predetermined number of bits (N bits).

Allowable Subject Matter

5. Claims 2, 8, 10, 16, 18, and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the references of record neither reveal nor render obvious the recited combination including applying a prefix oriented decoding method to the bits initially read from the bit stream when the decoded value is indicated to be not valid.

Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see references cited on PTO-892 Form attached herewith).

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571-272-1809. The examiner can normally be reached on 9:00 - 5:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford (Rex) Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2819

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Khai M. Nguyen
Art Unit: 2819
571-272-1809